

Date: Tue, 11 Oct 94 04:30:19 PDT
From: Ham-Digital Mailing List and Newsgroup <ham-digital@ucsd.edu>
Errors-To: Ham-Digital-Errors@UCSD.Edu
Reply-To: Ham-Digital@UCSD.Edu
Precedence: List
Subject: Ham-Digital Digest V94 #337
To: Ham-Digital

Ham-Digital Digest Tue, 11 Oct 94 Volume 94 : Issue 337

Today's Topics:

Ham-Digital Digest V94 #336
JNOS 1.10G & 4 asy ports??
THENET X1J2

Send Replies or notes for publication to: <Ham-Digital@UCSD.Edu>
Send subscription requests to: <Ham-Digital-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

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(by FTP only) from UCSD.Edu in directory "mailarchives/ham-digital".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 11 Oct 94 01:45:23 GMT
From: mwestfal@iris.CSci.CSusb.EDU (Michael Westfall)
Subject: Ham-Digital Digest V94 #336

In a former treatise, Ham-Digital Mailing List and Newsgroup spake thusly:

-> Date: 10 Oct 94 22:03:19 GMT
-> From: jca@pe1dgz.TNO.NL (Jan-Charles Aarden)
-> Subject: JNOS 1.10G & 4 asy ports??
->
-> Hi,
->
-> I compiled JNOS 1.10G for a friend. His object is to run JNOS with
-> 4 PK-88's on different ports. The ports DO HAVE unique addresses and
-> IRQ's but JNOS can only use COM1 and COM2.
-> Is there a solution for this problem?
-> (I do agree that he can better use a SCC card but that is not the issue,hi)

Since when does JNOS support only COM1 & COM2? I'm using JNOS 1.10G and
I have 4 asy ports attached, and they all work fine...

You just gotta make sure each asy port has it's own IRQ. The "normal" COM3 & COM4 won't work if your using COM1 & COM2 (the normal ones, that is..) You have to rewire the IRQs for COM3 & COM4 to use IRQs other than IRQ3 and IRQ4....

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73 de Mike,      ax.25net:      N6KUY@W6JBT.#SOCA.CA.USA.NOAM
                  amprnet:      n6kuy@n6kuy.ampr.org [44.18.0.49]
                  internet :    mwestfal@silicon.csci.csusb.edu
Linux: the Gates of Hell shall not prevail.
GCS/M { -d+ p+ c++ l u++ e+(*) m++(-) s/+ !n-(---) h-- !f g+ w+ t++ r-(--) y+ }
-----
```

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-----

Date: Mon, 10 Oct 1994 20:46:18 GMT
From: jp11@vectorbd.com (Jim Lill)
Subject: JNOS 1.10G & 4 asy ports??
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Jan-Charles Aarden (jca@pe1dgz.TNO.NL) wrote:
: I compiled JNOS 1.10G for a friend. His object is to run JNOS with
: 4 PK-88's on different ports. The ports DO HAVE unique addresses and
: IRQ's but JNOS can only use COM1 and COM2.
: Is there a solution for this problem?
: (I do agree that he can better use a SCC card but that is not the issue,hi)

jnos1.10g contains the serial ports mods we created for the switch at WB2PSI. That system has been running 4-6 async ports for a few years. The COM1/2 limit conception may come from documentation problems but not from the code itself!

the PSI mods also added the chained IRQ code from GRI along with matrix capable NetROM flow control.

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--
~~~~~
Jim Lill                / Vector Board BBS  \
jp11@vectorbd.com      \ 716-544-1863/2645 /
wa2zkd@wb2psi.#wny.usa.na  GEnie: ZKD
-----
```

Date: Mon, 10 Oct 94 13:49:36 EDT

From: rapp@lmr.mv.com (Larry Rappaport)
Subject: THENET X1J2

jim.ridley@aznetig.stat.com (Jim Ridley) writes:

> I am having a problem with the memory deteriorating on a X1J2 firmware.
> The memory seems to deteriorate worse when large file transfers and etc
> are being passed. I am using a Tiny II with a DCD board installed.
> Meter switches have been toggled off. I understand this is somewhat of
> a common problem and I wonder if anyone has a solution.
> Thanks de Jim Ridley (K5LGW)

Having the same problem. The only other solution I've heard of is to use 10Mhz TNC's. Over the last weekend, I spoke to Bert, VE2BLY, who suggested that the R2 firmware is just buggy, and that the only solution is to switch back to R1 until they fix it. Apparently, all you lose is the 3 extra channels for D/A conversion, but if you're not using them, it's no big loss.

If you learn of any other solutions, PLEASE post it here or email. Thanks.

W1HJF

--

Larry

L. M. Rappaport & Associates, Inc. rapp@lmr.mv.com voice +1 603 237 8400
Colebrook, NH 03576-0158 CIS 72427,2567 fax +1 603 237 8430

Date: Mon, 10 Oct 1994 16:03:01 GMT
From: gary@ke4zv.atl.ga.us (Gary Coffman)

References<36uta3\$50k@sbrick.cs.sunysb.edu>
<1994Oct8.134931.16121@ke4zv.atl.ga.us>, <37beg4\$pte@sbrick.cs.sunysb.edu>
Reply-To: gary@ke4zv.atl.ga.us (Gary Coffman)
Subject: Re: 56k+ Packet System

In article <37beg4\$pte@sbrick.cs.sunysb.edu> rick@cs.sunysb.edu (Rick Spanbauer) writes:

>Gary Coffman (gary@ke4zv.atl.ga.us) wrote:
>: That's right, they have to spend \$50 for a static hot air torch like
>: the Weller Pyropen. Works fine for SMD assembly. SMD is definitely the
>: wave of the future for all homebrew construction. Amateurs are going
>: to have to get used to it. (The existing GRAPES modem doesn't use SMD
>: however, though future versions might.)
>

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> I have seen your postings before about the Pyropen and put it on
> the list to evaluate.. One of the other hats I wear is that of a
> hardware vendor - we design/manufacture peripherals for one of the
> other personal computer architectures. We run several hundred SMT
> boards at a time through contract assembly houses. I can tell you from
> firsthand experience that even a professional assembler has a certain
> fallout rate with 25 mil packages. Would like to believe the average
> ham can pick up a pyropen, lay down some solder paste, and hit a home
>
> run soldering something like a pqfp160 package, but this really
> stretches the imagination a bit ;-) It's not so much having the
> tools, it is the technique in using them...

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No argument there, technique is everything. I *can* use a Bernz-O-Matic torch for SMD, though I prefer not to. It's all in the technique. What *won't* work is inadequate heat flow. That's why the pointy little irons are worse than useless. The ideal system keeps the temperature below 398 C while maximizing heat flow. You can simulate that with the torches by suitable variation of distance and time, but a real controlled hot semi-inert gas source works best. The Pyropen will give you a oxygen depleted hot air flow that does nice work if you control distance and time well enough. All that takes is practice. (Sounds like a pitch for Morse Code.) :-)

Gary

--

Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
Destructive Testing Systems		we break it.		emory!kd4nc!ke4zv!gary
534 Shannon Way		Guaranteed!		gary@ke4zv.atl.ga.us
Lawrenceville, GA 30244				

Date: Mon, 10 Oct 1994 23:11:31 GMT
 From: dts@world.std.com (Daniel T Senie)

References<1994oct8.131116.15772@ke4zv.atl.ga.us> <CxFMMA.K8n@world.std.com>,
 <1994oct10.122726.26701@ke4zv.atl.ga.us>
 Subject: Re: 56k+ Packet System

In article <1994oct10.122726.26701@ke4zv.atl.ga.us>,
 Gary Coffman <gary@ke4zv.atl.ga.us> wrote:
 >In article <CxFMMA.K8n@world.std.com> dts@world.std.com (Daniel T Senie) writes:
 >>In article <1994oct8.131116.15772@ke4zv.atl.ga.us>,
 >>Gary Coffman <gary@ke4zv.atl.ga.us> wrote:
 >>>In article <Cx9FrL.IxF@world.std.com> dts@world.std.com (Daniel T Senie)
 writes:
 >>Most of the high speed packet usage I've seen has been for dedicated point-

>>to-point links. At least that's the case up here in the northeast. When
>>that IS the case, the issue of multiple signals goes away (or let's assume
>>so for the sake of discussion).
>>
>>Assume two radios of known manufacture (and same brand and model just to
>>ensure all is the same). Assume FULL DUPLEX on two frequencies, so that
>>both ends are ALWAYS keyed and transmitting. This eliminates the call setup
>>issues.
>>
>>Now, I still do not understand how a cell phone can get 14.4kBPS through
>>a channel where we could not do the same on a dedicated, full duplex
>>circuit.
>
>We can, of course. In fact, with the system you propose, we can simply
>use telephone modems and slip or PPP. The down side is that we have
>basically two repeaters, with their expensive duplexers, tying up two
>channels all the time for sporadic data transmissions between two stations.
>That's very wasteful.
>
>>So if we were to construct equipment for dedicated links as I described
>>above, and used training, then we'd be able to get 14.4K or 28.8k data
>>rates over a 3kHz wide voice passband? (again assuming the dedicated
>>pair of frequencies, and RF gear of known design).
>
>Probably. The telco line has less phase distortion than the typical
>amateur grade voice radio's IF filter, so it might still be somewhat
>less, but we can let the telco style modems negotiate and train to
>work around that as best they can.
>
>>I guess I'd always assumed that the GRAPES stuff was used to build backbone
>>links of a network. From the issues you raise, it appears that this is
>>a misconception, and that you have set up networks of multi-access
>>stations over GRAPES modems at 56K. Is this correct?
>
>It slices, it dices, *and* it makes mounds of coleslaw. :-)
>
>Yes, The GRAPES modems are suitable for use in user MANs. In fact that
>was the original purpose of the design. They also happen to be useful
>for medium speed trunks, but that's just a bonus. The modem hasn't been
>as widely adopted by users as we'd like, but it certainly is designed
>to be an end user system. As I keep pointing out, it's cheaper than a
>dedicated voice radio and low speed modem. Ok, it's a kit in an era
>of appliance operators, and until recently you've had to scrounge
>for transverters, but these things are simpler than most kits, certainly
>easier to build and get running properly than the Ramsey transceivers.
>The only real drawback is that they don't interoperate with low speed
>modems. You must have someone else in the area with one if you want
>to use it, but that's true of most 9600 baud modems too.

Thanks for all the clarifications. It all makes more sense now.

As for the acceptance of the GRAPES system, I've a few suggestions and questions. The requirement for an outboard transverter from a different source is definitely a problem. If your group had a transverter setup as part of the kit (or available as part of it) you'd certainly get more people to go for it. It's a lot simpler to buy a kit of boards and perhaps components from a single source, rather than multiple ones.

What does the modem communicate with? Does it take in an HDLC data stream? I do software for routers that talk IP and the like, and have thought about writing a driver to do the IP over AX.25 stuff used on packet radio IP. (If someone'd point me toward documentation of the details of the packet formats, and if I can get the router to slow down enough, I might be able to write such a beast). I can connect off of my boxes at V.35, RS-232 or X.21 line levels. I suspect I'd have to adapt those for your modem, but perhaps not. Could be interesting to have a router on my house ethernet talking IP to the radio world...

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End of Ham-Digital Digest V94 #337
